

**SITE REVIEW WRITTEN STATEMENT  
RESPONSE TO STAFF REVIEW OF FEBRUARY 8, 2010**

DATE: March 17, 2010

PROJECT NAME: The Armory

REGARDING: Site Review Response to Staff Comments  
of February 8, 2010

LOCATION: 4640 TABLE MESA DRIVE & 555 TANTRA DRIVE

REVIEW TYPE: BVCP Land Use Designation Change, Rezoning & Site Review

REVIEW NUMBER: LUR2009-00061 (Land Use Map Change & Rezoning) & LUR2009-00062 (Site Review)

APPLICANT: FOUR STAR REALTY

**ARMORY OVERVIEW STATEMENT  
SITE REVIEW**

Since the Staff Comments were issued on February 8, 2010, a significant number of clarifications and improvements have been incorporated into the Armory Project. The changes to the Site Review Documents are summarized below each individual Staff Comment and is highlighted in bold text.

**STAFF COMMENTS**

**CITY OF BOULDER  
LAND USE REVIEW RESULTS AND COMMENTS**

DATE OF COMMENTS: **February 8, 2010**

CASE MANAGER: **Karl Guiler**

PROJECT NAME: **THE ARMORY**

LOCATION: **4640 TABLE MESA DRIVE & 555 TANTRA DRIVE**

COORDINATES: **S03W02**

REVIEW TYPE: **BVCP Land Use Designation Change, Rezoning & Site Review**

REVIEW NUMBER: **LUR2009-00061 (Land Use Map Change & Rezoning) & LUR2009-00062 (Site Review)**

APPLICANT: **FOUR STAR REALTY**

DESCRIPTION: **1) BOULDER VALLEY COMPREHENSIVE PLAN (BVCP) LAND USE MAP CHANGE:** Request to change the BVCP land use map designation from Public to Medium Density Residential.

**2) REZONING:** Request to rezone the property from RL-1 (Low Density Residential – 1) to RM-1 (Medium Density Residential – 1).

**3) SITE REVIEW:** Request for approval to redevelop the existing Army Reserve Training Center site with a variety of residential housing types (e.g., row houses, duplexes, and single family homes) totaling 37 units (including seven permanently affordable units). The units would be accessed off of Tantra Drive with fire/emergency access off of Table Mesa Drive.

**4) VESTED RIGHTS:** Pursuant to Section 9-2-19, B.R.C. 1981, the applicant is also requesting approval of vested rights to allow a start date within five years of approval of the development.

**REQUESTED MODIFICATIONS FROM THE LAND USE REGULATIONS:**

1. *Section 9-9-2(b), B.R.C. 1981- Maximum Permitted Buildings on a Lot (request for more than one in RM-1).*
2. *Section 9-7-1, B.R.C. 1981- Parking within the required 20-foot landscaped setback along Table Mesa and internal rights-of-way.*
3. *Section 9-7-1, B.R.C. 1981- 20-foot required rear yard setback, as follows:*
  - ✓ *SFD\*: 17' from rear lot line;*
  - ✓ *MFD\*\*: 19'2" from rear lot line, and*
  - ✓ *MFD decks: 13'1".*
4. *Section 9-7-1, B.R.C. 1981- Required front yard setback of 20 feet-*
  - ✓ *MFD along new rights-of-way would be as close as 3 feet 9 inches, and*
  - ✓ *SFD: 19'*
5. *Section 9-7-1, B.R.C. 1981- Required front yard setback for accessory structures of 55 feet.*
  - ✓ *Trellis structure proposed at roughly 40 feet.*
6. *Section 9-9-11(f)(4), B.R.C. 1981- Request to include landscape areas within rights-of-way up to 10% of required useable open space.*
7. *Section 9-9-6(f), B.R.C. 1981- Request for a parking reduction of 25% to permit 65 off-street spaces where 87 are required.*

\* Single family dwelling.

\*\* Multi-family dwelling.

**I. REVIEW FINDINGS**

Staff finds that the project would meet the criteria related to a Boulder Valley Comprehensive Plan (BVCP) land use map change, rezoning, and Site Review, and intends to recommend approval of the project to the Planning Board and City Council. Further, staff will recommend approval of RM-1, Medium Density Residential zoning across the entire site, but only contingent on the restriction of the west side use of the site as single-family dwellings regulated under RL-1, Low Density Residential zoning as specified within this document.

Prior to final plans being forwarded to Planning Board for review, the following issues must be resolved and addressed in revised project plans submitted as new review sets:

1. *Adjustments to plan to comply with Chapter 9-6, "Inclusionary Zoning," B.R.C. 1981;*
2. *Utility/landscape conflicts;*
3. *Impacts to existing vegetation on the site;*
4. *Updates to traffic study and TDM;*
5. *Modifications to public rights-of-way and sight triangles;*
6. *Clarification on the restrictions applied to the single-family dwelling unit sites;*
7. *Adjustments to height calculations per code;*
8. *Submittal of responses to the required parking reduction criteria of section 9-2-14(h)(2)(K), B.R.C. 1981;*
9. *Adjustments to parking calculations as stated herein;*
10. *Adjustments to open space calculations per recent phone discussions, and*
11. *Vested rights and phasing, as elaborated below:*

Staff understands the applicant's request for vested rights greater than 3 years given current economic conditions and agrees that the city should afford some flexibility to the applicant to better enable a feasible build-out of the project. However, staff continues to have concerns about the current request that leaves the finality of the project open ended. Treating each building as a "phase" could potentially present considerable impacts to neighbors with construction noise and unsightliness extended well into the future. Staff will not recommend approval of such a condition. With flexibility still in mind, staff recommends that the applicant return with an alternative phasing proposal that includes a more reasonable number of phases and end dates to each bearing in mind how the length of construction could impact the neighboring community.

City Council can grant vested rights greater than three years pursuant to section 9-2-19(e), B.R.C. 1981 by ordinance. The period of years must be specific and may not be open-ended. In the alternative, the applicant could pursue a development schedule/phasing plan pursuant to 9-2-12, B.R.C. 1981. If it is determined in the future that extensions will

be needed for each phase based on economic conditions, the land use code already has a procedure for staff and board consideration for extensions. Please review section 9-2-12, B.R.C. 1981 for this process in your consideration of a phasing plan.

Please submit 10 new review sets and accompanying materials to the Project Specialists within 60 days. If review sets are not received within that time, the application will be deemed withdrawn, unless the applicant notifies the Case Manager before the deadline of a good faith reason for delay. The Case Manager may extend the review under such circumstances.

Please review the comments below and address the issues in their entirety. A written response to each staff comment regarding how the requirement has been met is also strongly recommended to facilitate a more expedient review of the changes. Upon resubmission and verification that the requirements contained within this document have been met in full, staff will schedule the project for Planning Board review.

If there are any questions related to process and/or zoning, please contact the Case Manager, Karl Guiler, at 303-441-4236. Questions relating to specific technical requirements should be forwarded to the individual reviewers (name and number of reviewer precedes each comment). If the applicant would like to set up a meeting to discuss the comments, please contact the Case Manager.

## **II. CITY REQUIREMENTS**

**Addressing**, Jessica Vaughn, 303-441-4161

The City is required to notify utility companies, the County Assessor's office, emergency services and the US Post Office of proposed addressing for development projects. A Final Address Plat and list of all proposed addresses should be prepared and submitted in hardcopy and digital (pdf) format to P&DS staff for routing and comment. This is considered part of the Technical Document Review process for a project of this size and scope and is in addition to the right-of-way dedication approval.

Additionally, in assigning addresses and street names please refer to the attached guidelines.

**The addressing of the development will be undertaken as part of the Technical Document Review.**

**Affordable Housing** Michelle Allen, Housing Planner 303-441-4076

Requirement: Chapter 9-6-5, B.R.C. 1981, "Inclusionary Zoning" requires that 20% of all new residential development be permanently affordable to low income households, with a variety of options available to satisfy that requirement, including on-site units, cash-in-lieu, or off-site units.

Proposal: Applicant's proposal is to fulfill the full affordable housing obligation on-site, with 7 of the 37 units as deed-restricted permanently affordable homes (18.9% of the affordable units provided on-site). This satisfies the required number of on-site units, but leaves 0.4 units to be satisfied through a cash-in-lieu contribution. The proposal satisfies the City's general preference for on-site permanently affordable units whenever possible.

**The project continues to provide 7 affordable units out of the 37 total units proposed.**

Distribution of Unit Types: The permanently affordable units must be composed of different unit types and distributed throughout the development proportionately with regards to unit type and number of bedrooms. The proposal contains 9 detached single-family units, and 28 attached units (12 row-house units and 16 units in paired homes). The provision of 1 permanently affordable detached single-family home, two paired home units, and four row-houses does not meet this requirement. Staff requests that the permanently affordable units be provided in the following configuration to better reflect the distribution of unit types in the overall project: 1 detached single family; 2 row house units; and 4 paired home units.

**The project has been revised to include the following permanently affordable units: One single Family unit, 2 Row Home units and 4 Paired Home units.**

Size Requirements: All proposed units are over 1,200 square feet and thus meet the size requirements. Applicant has been advised that there is a minimum size requirement for permanently affordable units.

**Comment acknowledged. The size of the proposed units remain the same.**

Cash-in-lieu: Applicant's proposal has 7 of 37 units as deed-restricted permanently affordable homes leaving 40% of a required affordable unit contributed as cash-in-lieu. Amounts are calculated, for the calendar year 2009, at \$119,922.35

per each required affordable detached unit \$110,177.70 per each required affordable attached unit. The proposal includes only one detached single-family home, falling short of the 1.8 detached single family homes that would be proportionate to the project as a whole. For this reason, staff calculates the fee-in-lieu requirement based on the detached single-family rate as follows:

$$0.4 \text{ units} \times \$119,922.35 = \$47,968.94$$

**Comment acknowledged.**

Agreements: A "Determination of Inclusionary Zoning Compliance Form" must be signed by both the applicant and housing planner prior to any development approval. Covenants to secure the permanent affordability of the units must be signed made prior to application for building permits. Any applicable cash-in-lieu contribution is due upon building permit issuance.

**Drainage** (Steve Buckbee, 303-441-3279)

1. The storm line and inlets on the south side of the entrance off of Tantra do not meet the minimum utility tree separation requirements. Revise the tree and/or storm locations to maintain 10 feet of horizontal separation between the trees and the storm line.

**The trees have been moved and /or deleted to facilitate the required 10 foot clearance.**

2. It is unclear how the 3 existing trees at the northeast corner of the site will be preserved. The proposed walk appears to maintain existing grade which would require a 6" to 8" cut in the drip line of the trees. Provide clarification and revise the grading plan as necessary to preserve the trees.

**The southern most tree of these 3 existing trees was inadvertently listed as "existing to remain", when in fact it is structurally defective and will be removed. The grading has been minimized in the area of the remaining two trees, and clarification as to the preservation is shown on Sheet L-4.**

3. Revise the detention pond design as necessary to address the Landscape comments regarding the retaining wall – tree separation requirements along Table Mesa. Wall heights higher than 30 inches within detention ponds are not allowed.

**Adjustments are made to accommodate supplemental clearance for trees and to keep the maximum exposed height of the walls at 2.5'.**

**Fees**

Please note that 2010 development review fees include a \$131 hourly rate for reviewer services following the initial city response (these written comments). Please see the P&DS Questions and Answers brochure for more information about the hourly billing system.

**Landscaping** Elizabeth Lokocz 303.441.3138

Generally, the resubmittal responds well to the previous comments. The following corrections need to be addressed for the next submittal.

1. The proposed paving around the existing Pin Oak forming the plaza will require an atypical detail to avoid negative impacts to the tree. No grading is indicated within the dripline of the tree, but any excavation and typical stone base used to set flagstone in will negatively impact the tree. Only minor leveling and small areas of stone should be installed below the flagstones. Submit a detail and any notes need to achieve this at the time of the Technical Document Review.

**A detail plan and notes will be submitted at the time of the Technical Document Review.**

2. Remove or revise note number 8 on sheet L-2 to indicate that as part of the Development Agreement, the Site Plan shall be maintained in perpetuity. The five year limit referenced is for by-right projects only.

**Note #8 has been revised on Sheet L-2.**

3. Replace the proposed Deborah Norway Maple with another large maturing tree. Staff suggests an American Elm variety such as the Valley Forge to take advantage of the wide right of way and planting strip along the access drive. Norway Maples will be removed from the approved street tree list in the near future due to their sensitivity to reflected heat and leaf scald i.e. they are not appropriate for mass planting along paved surfaces including roads, sidewalks and parking lots.

**Deborah Norway Maples have been replaced with Valley Forge American Elm. Sheets L-1 and L-2.**

4. Replace the proposed Prairie Gem Pear with a medium or large maturing species that can meet the sight triangle requirements. The Prairie Gem Pear is not likely to be available from the nursery branching over 8 feet and structural issues. A broader maturing species is preferable as a street tree. Staff suggests choosing one of the oaks from the approved street tree list such as the Bur or Swamp White Oak.

**Prairie Gem Pears have been replaced with Bur Oaks. Sheets L-1 and L-2.**

5. The proposed buffer along the western project edge has several species that could be substituted with more interesting and longer lived species. Also note that the overhead utility lines are very likely to conflict with the proposed species. The proposed Narrow Leaf Cottonwood is likely to become a hazard past maturity (as soon as 25 years) and could interfere with the intended passive and active solar homes. The proposed Gray Gleam Juniper maintains a tight narrow shape offering little actual screening or sense of separation. Staff suggests lower spreading ornamental deciduous trees including but not limited to Redbud, clump form Serviceberry, or Crabapple (Prairie Fire or Spring Snow). Few if any coniferous trees will remain under 25 feet in height and should not be planted under the utility lines. Other dense, large maturing shrubs such as Viburnum might also be appropriate to help provide separation.

**Narrowleaf Cottonwood was selected to screen the utility lines from view looking from the east. They have been replaced with Swedish Aspen, which will accomplish the screening, do not become a hazard and have a narrower growth habit so as not to interfere with the passive solar and active solar homes. They are to be planted east of the overhead utility lines so as not to interfere with them at maturity.**

**There is a variety of large shrubs that have been selected to provide screening, wildlife habitat and edible fruit, and have the growth habit similar to the small trees suggested (Redbud, clump form Serviceberry, Prairie Fire or Spring Snow Crabapple): spreading, but not quite as tall. These are the Chokecherry, Elder, Nanking Cherry, and Wasatch Maple.**

**The Gray Gleam Juniper was chosen to provide winter interest as well as vertical counterpoint to the screen. They have been replaced with Moon Glow Juniper, which will spread several feet wider than the Gray Gleam, but still remain lower than the overhead utility lines at maturity.**

**Austrian Pine was selected to screen the utility lines from the view looking from the west, as well. The existing over head utility line that is most to the east is just inches to the east of the existing fence, which will become the living fence. The Austrian Pines are proposed to be planted 12' east of the east most line. Austrians have a maximum spread at maturity of 30-40'. They will never have to be "topped", but might need minor limb pruning on the west side at maturity ONLY if they reach their maximum width, which is unlikely given the close proximity of the other plantings.**

6. Tree #18, a 10 inch Green Ash, is indicated for removal on sheet L-4 but appears as being preserved on all other sheets. Correct as needed to consistently show if the tree is being preserved.

**Tree #18 is to be removed, and sheets L-1, L-2, L-3 and L-4 have been corrected.**

7. Fire hydrants need to meet the minimum ten foot separation from proposed street trees. Two are within three feet of a proposed tree. Evaluate if the fire hydrants can be adjusted and if not evaluate the tree placement and spacing.

**Hydrant locations are adjusted to meet the clearance.**

8. It appears that the proposed storm piping was not coordinated with the proposed planting plan. Realign all proposed storm piping to maintain separation requirements from trees.

**The storm drainage system is proposed in locations to meet the City's criteria for drainage management. Adjustments to storm systems were made where possible. Adjustments to the landscape have also been made to coordinate with the storm drainage system.**

9. The proposed water service to paired home 17 needs to be adjusted to the north to maintain the required ten foot utility separation.

**The plans have been updated by shifting the water service about 2' to the north.**

10. The proposed retaining wall adjacent to the Table Mesa sidewalk appears to be within two feet of the proposed street trees significantly limiting the available soil volume and their potential life span. The detention needs to accommodate long lived healthy street trees. No retaining should be placed with ten feet of proposed trees to allow for growth potential.

**The two trees in question have been moved. One is now shown on the west end of the property adjacent**

**to Table Mesa, and one has moved east to the other side of the bus shelter on Table Mesa. The required 10' separation of trees and retaining walls has now been met.**

11. Please clarify the intent of the fence information provided on Sheet L-1. With four different heights and four different types of fencing, it's unclear to staff if the fencing is specific to the proposed landscape plan or intended as a sampling of possible choices. Is the desired effect to have a mix of materials and visibility and/or to provide choices to future residents?

**The different types of fencing shown on sheet L-1 are the possible choices. The desired effect is to have a mix of materials and visibility and to provide choices to future residents.**

**Legal Documents**

Karl Guiler, Case Manager, 303-441-4236; Julia Chase, City Attorney's Office, 303-441-3052

1. Prior to signing the development agreement, if approved, the applicant will be required to provide the following:
- an updated title commitment current within 30 days; and
  - proof of authorization confirming who can sign for the owner (Patience Holdings, LLC).

**Comment acknowledged.**

2. If the applicant wishes to pursue vested rights beyond 3 years, then the Vested Rights form must be resubmitted to specify the length of time. (Please refer to Review Findings above for additional comments on vested rights.)

**Pursuant to Section 9-2-12(a), "Three Year Rule," B.R.C. 1981, the following development/phasing plan is approved:**

**a. Phase I, to construct infrastructure necessary to support extensive landscaping and living fence along the western property line, to plant the western landscaping and to remove existing diseased or unhealthy trees and vegetation as per the landscaping plan shall commence at the date of this approval and shall be substantially completed within three years or as soon as the first building permit is issued, whichever occurs first.**

**b. Phase II, to construct roads, sidewalks, utilities and deconstruct existing buildings shall commence upon the expiration of Phase 1 and expires three years thereafter.**

**c. Phase III, to construct buildings #1 (affordable home), #10 (6 plex - 2 affordable), #11 (3 plex), #12 (3 plex), shall commence upon the expiration of Phase 2 and expires three years thereafter.**

**d. Phase IV, to construct duplex buildings #13, 14, 15, 16, 17 (affordable duplex), 18 (affordable duplex), shall commence upon the expiration of Phase 3 and expires three years thereafter.**

**e. Phase V, to construct single family buildings #2, 3, 4, 5, 6, 7, 8, 9 and duplex buildings #19 and 20, shall commence upon the expiration of Phase 3 and expires three years thereafter.**

**Phases may be started and built concurrently or in different order. Due to current lending practices requiring that 70% of a phase be sold prior to funding buyer mortgages, the developer may be required to create smaller individual phases within the phases outlined above, but the time frame for the phases outlined above will not change as a result.**

**Neighborhood Comments**

Karl Guiler, Case Manager, 303-441-4236

Staff has received several inquiries on the status of the project and some written comments expressing concern about the project and support for the project. These comments will be forwarded to the applicant and ultimately the Planning Board for consideration.

**Neighbors adjacent to the Armory site, that live along the east side of 46<sup>th</sup> Street, submitted a letter of concerns to the developer in early November, 2009. As a result of their requests, the landscaping has been modified to include additional screening trees that will be planted west of the single family homes. Additionally, the chain link fence that separates the property from the neighboring rear yards will be developed as a "living screen wall" with the addition of vines and other planted materials. To develop these plants for the future, the developer plans to install the plant materials and temporary irrigation during the next growing season, therefore, these plant materials will be better established for the future when the single**

family units are constructed.

The under grounding of the power lines was investigated, however, it was determined that this is not feasible. Since these lines are a regional distribution system, there is no splicing of the line at any intermediate point. Therefore, the entire line would need to be replaced from start to end point, if any section of the line was placed below the surface.

At Concept Review, the developer requested 41 total units. As revised, the Armory project includes 37 units, therefore, the density has been reduced by 10%. At the Concept Review in 2006, there was a street running parallel to the west property line serving duplex units. With the current design, single family units back up the Martin Acres neighbors and the rear yard set back meets the limitations of the RL-1 Zone. These revisions have been made to increase compatibility with the adjacent neighbors.

Redesigning the Paired Homes with a limit of 2 stories was not found acceptable since the Open Space requirement is established at 3,000 s. ft. per unit. Shorter, two story units would occupy a much larger surface area of the site and the required Open Space couldn't be provided. There are two Paired Home buildings that are designed to be 2 stories in height where the useable square footage was reduced to make this possible.

The Row Homes have been redesigned into three smaller structures and the density was reduced from 14 units to 12. A 6 unit building parallels Table Mesa along the Community Gardens. Two tri-plex Row Home buildings comprise the remainder of the Row Homes to replace a 7 unit building. The entire Row Home section has been moved 12 feet north of their former location to make room for the 60 foot public right-of-way for the main entry drive. The total number of Paired Homes has been reduced from 18 down to 16. Two of the eight Paired Home structures are now 2 story in height as these are the affordable units.

**Plan Documents** Karl Guiler, Case Manager, 303-441-4236

1. Please rename 'Private Street' to 'Private Circulation.'

The "private street" label has been revised to use the term "private drive" to describe the non-dedicated street section.

2. Include the net density of the site in the Site Data table.

The Site Data Table has been revised to include "net density" with all public rights-of-way deducted.

**Site Design** Karl Guiler, Case Manager, 303-441-4236

1. To increase the usability of the central green space staff suggests the inclusion of picnic tables or other seating elements.

The applicant would prefer to leave the central "green space" between the Paired Homes open for general use without the addition of a picnic table at this time. This would not preclude the H.O.A. from adding a moveable picnic table in the future.

**Transportation** (Michelle Mahan, 303-441-4417)

Traffic Impact Study

2. The plans propose modifications to the existing traffic island in Tantra Drive, however this has not been addressed and supported in the traffic impact study. A queuing analysis must be provided for the proposed shared left turn lane. In addition, the study must address how any turning movement conflicts (primarily related to the grocery store entrance on the east side of the street and the proposed street intersection on the west side of the street) will be mitigated. Revise the traffic study accordingly and the plans as needed.

The Traffic Analysis has addressed the queuing of the left turn lane.

3. The Signalized Intersection Capacity Analyses included in the appendix of the Traffic Impact Study do not include the times of day and times of week which were analyzed and must be revised accordingly.

The SYNCHRO Intersection Capacity Analysis worksheets included in Appendix C of the Armory Traffic Impact Study of January 2010 omitted the Analysis Time Period in the headings, thus making it extremely difficult to correlate with the results tabulated in the report. These analysis time periods have been added

**in boxes at the top of each worksheet. This, in addition to printing the worksheets on only one side, should make it easy to correlate with the results summarized in the text.**

**TDM**

3. The submitted Travel Demand Management plan, (TDM), identifies effective Market and Outreach strategies to mitigate traffic impacts created by the development, but does not provide a clear commitment to their implementation. With the reinstatement of the Neighborhood Eco Pass program, the applicant should pledge to participate in the program for the three year minimum commitment period. In addition, the two other strategies should be reworded to more clearly establish a partnership between the Homeowners Association to be created, and GO Boulder. Provide a revised TDM plan with the proposed Market and Outreach strategies modified as shown below:

To manage the property, a Homeowners Association (HOA) shall be formed. The applicant will include in the HOA by-laws a provision stating that the Armory HOA will work with GO Boulder to implement the Neighborhood Eco Pass Program and maintain the proposed TDM Plan. Also, the Armory HOA will create a website that will include a link to GO Boulder programs and provide GO Boulder contact information for residents seeking assistance.

Upon occupancy, residents will receive from GO Boulder, a welcome kit containing information on alternative transportation, maps, and transit schedules. It is the responsibility of the applicant to notify GO Boulder of impending occupancies so that welcome kits can be produced and delivered.

The HOA will be required to participate in periodic surveys to measure changes in travel behavior of both employees and residents. Surveys and analysis will be provided by GO Boulder with online or hard copy options. The HOA's role will be to distribute surveys to residents.

The applicant should contact Chris Hagelin, Senior Transportation Planner with GO Boulder, 303 441-1832, to discuss any alterations to the TDM plan that differ from those stated above.

In addition to the Transportation Demand Management (TDM) strategies being implemented into the traffic impact study, a separate copy of the TDM plan should also be submitted for recording purposes.

**A revised Travel Demand Management Plan has been submitted with these revisions.**

4. The Site Plan and the Bus Shelter Exhibit must be revised to clearly dimension the required 6'x13' shelter pad along with illustrating and dimensioning the associated public access easement. In addition, the bus shelter should be reoriented to be parallel to the sidewalk rather than slightly skewed as shown on the plans. The plans must also illustrate and dimension one u-rack adjacent to the shelter. Revise the plans accordingly.

**The bus shelter has been revised, the bike rack added and a dimensioned drawing has been added to Sheet SR 2.**

5. The plans must be revised to show and label fire approved bollards to be installed at the secondary emergency access between buildings 10 and 11. Revise the plans accordingly.

**Fire lane bollards have been added between Buildings 10 and 11.**

6. Per Section 2.10 of the DCS, emergency access lanes must be entirely contained within a minimum, continuous 20 foot wide emergency access easement or public right-of-way. Vertical clearance from the surface of the emergency access lane must be at least 15 feet. The plans must illustrate, label, and dimension all required emergency access easements at this time. Revise the Site Plan accordingly.

**The Site Plan shows all easements and the Civil Drawings show easement dimensions.**

7. Revise the Site Plan to include a note or schematic showing the "no parking" areas due to the necessary emergency access clearance. A signage plan will be required at the time of Final Engineering.

**No Parking sign locations will be submitted with the Technical Document Review with a signage plan. Areas where parking is allowed are shown as a separately hatched area of the pavement.**



8. All driveways are required to have an unobstructed sight triangle measured as 15 feet along the edge of the driveway and 15 feet along the public right of way line, with a line connecting these two lines. The plans show the sight triangles drawn along the street flowline and must be revised. In addition, these sight triangles must be dimensioned on the plans. Revise Sheet L-1 accordingly.

**Sight triangles are revised and shown on Sheet L-1. The sight triangles at the Single Family Homes overlap the front porch, however, the porch framing is low enough not to interfere with the requirement.**

9. Sheet L-1 must be revised to clearly dimension all public street intersection sight triangles in accordance with Table 9-8 of the Boulder Revised Code.

**Sight triangles are dimensioned on Sheet L-1.**

10. Per Section 2.04 of the City of Boulder Design and Construction Standards, the initial access grade (to a point 10 feet beyond the ROW) must be at a positive 1%-6% slope and the final grade must be between 1% and 8%, with a maximum grade break of (+/-) 6%. The applicant must demonstrate compliance with these criteria by illustrating and dimensioning the proposed garage access ramp slope for the required distances on the plans, in order to verify adequate accommodation of the proposed site layout prior to Site Review approval.

**The overlot grade of the project limits slopes along property lines to between 2% and 5.6%. As such, the driveways will be between 2% and 6% grade. Any special grading conditions, such as the paired home at the turn around, are included as an exhibit to this submittal, otherwise, unless someone buries a house in the ground, or raises it out of the ground, then the driveway would have to fall within the listed slope restraints. A site access and driveway plan is provided to demonstrate compliance with the code.**

11. The plans must be revised to a standard drive cut (per City of Boulder standard detail 2.21) for the proposed private drive connection from the public cul-de-sac. Revise the plans accordingly.

**The plan is updated to reflect this, the sidewalk at the cul-de-sac is attached, so the M-609-1 standard, Type 2 driveway is applied.**

12. The public right-of-way widths must be adjusted to allow a minimum of 1-foot beyond the back of walk rather than the 6-inches shown.

**A detailed cross section of the roadway and right of way is included as an exhibit with the Utility Plan. The section depicts the 48' right of way with 6" from back of walk to right of way and then a 6" sidewalk maintenance easement on the adjacent lot. As confirmed, this will be acceptable as the cross section.**

#### Bike Parking

10. Bicycle parking is proposed to be provided at both of the pedestrian plazas per the TDM, however, the plans show bike parking only near Pin Oak Plaza. In addition, it is unclear what type of rack is to be used and the number of parking spaces to be provided. Per section 2.11(E)(2) of the City of Boulder Design and Construction Standards, (DCS), bicycle parking racks should generally be the inverted "U" or Cora style rack, or meet requirements 1 thru 4 of "Other rack styles".

**Bicycle parking is indicated at both the Pin Oak Plaza and the Central Plaza. Inverted "U" shaped racks are proposed. Detailed Site Plans are shown on Sheet SR-6.**

The plans must clearly label the number of bike parking spaces provided and the dimensions of the pad of each new bicycle parking area proposed.

**Detailed Site Plans are shown on Sheet SR-6. A total of 10 bike racks are provided, including 2 at the Bus Shelter.**

The required spacing between each proposed bike rack and any adjacent bike rack, walls, planters, obstructions, accessible routes, required clear sidewalk/multi-use path widths, etc, must be clearly dimensioned in accordance with section 2.11(E)(1) and Standard Detail number 2.52.B of the DCS. Revise plans to show all proposed bicycle parking racks located to meet minimum required clearances. In addition, the Site plan and Landscape plan should be consistent in the number, location and orientation of each proposed bicycle parking area.

**Detailed Site Plans are shown on Sheet SR-6.**

**Utilities** (Steve Buckbee, 303-441-3279)

1. See Landscape comments regarding tree utility separations.

**Comment acknowledged and updated as noted. All landscape comments have been addressed above.**

2. Explain how access supporting maintenance vehicles weighing up to 14 tons will be provided to the existing, southern sanitary sewer manhole.

**This sewer manhole is on the adjacent City of Boulder Parks Department property. It appears that the best access to this manhole is through the City owned site, it is on their side of the fence and they have an access road in place to the site and area.**

3. Re-align the sanitary sewer service for Single Family #9 so that it does not tie into the manhole.

**Updated as noted.**

**Zoning** Karl Guiler, Case Manager, 303-441-4236

Single-family building sites

The applicant has elected to apply the recently adopted Compatible Development to the single family sites to ensure greater compatibility between the subject development and the existing neighborhood to the west, which would be automatically applied to low density residential developments within the city.

Staff has reviewed the sample "virtual lot" and has found that the building sites as virtual lots appear to meet Compatible Development standards. A final determination of this will be done either at Technical Documents review or building permit.

To provide clarity of how regulations will be applied to the "virtual lots" the following table shall be added to a new separate site plan showing all single-family homes and building sites:

**The Table of Zoning Limits For Single Family Homes, as shown below, with minor refinements, has been added to the drawings and is shown on Sheet SR-5.**

Special Regulations for Single-family Building sites:

1. The building sites (virtual lots) along the development's west side shall be developed with single-family dwelling units. No multi-family dwelling units or accessory dwelling units will be permitted in that area.
2. Single-family home sites as shown are unsubdivided, but will be required to meet all RL-1 zoning regulations (unless specifically modified as described herein) where virtual lots, as shown on the plan, will be considered the same as a subdivided lot, as follows:

<b>Zoning limits for single-family homes</b>	<b>Armory development</b>	<b>RL-1 zoning (for reference)</b>
Minimum/Maximum Virtual Lot size*	5,831 square feet (68' frontage by 85.75' lot depth)	7,000 square feet
Front yard setback from right-of-way line/virtual lot frontage**	19 feet minimum	25 feet
Rear yard setback from western property line	25 feet minimum	25 feet
Side yard setback from virtual lot line (north)	10 feet minimum (for passive solar purposes)	5 feet
Side yard setback from virtual lot line (south)	No less than 5 feet to meet 15' combined setback	5 feet (with 15 foot combined)
Maximum lot coverage per (virtual) lot	2,216.2 square feet (38%)	2,450 square feet (35%)
Maximum floor area per (virtual) lot	3,266.2 square feet (0.56 FAR)	3,500 square feet (0.5 FAR)
Maximum number of stories for 'single-family' structures.	No limit	2
Side yard bulk plane	As specified in section 9-7-9. B.R.C. 1981 measured from virtual side lot lines.	As specified in section 9-7-9., B.R.C. 1981 measured from side lot lines.
Side Yard Wall Articulation	As specified in section 9-7-10, B.R.C. 1981 measured from virtual side lot lines.	As specified in section 9-7-10. B.R.C. 1981 measured from side lot lines.

Solar Access	12' solar fence at west property line; 25' solar fence at virtual property lines.	12' solar fence at property lines
--------------	---	-----------------------------------

\*Any future modifications to virtual lot sizes must be reviewed under either a Site Review Amendment, Minor Site Review Amendment, or minor modification, as determined by the city manager based on the complexity of the change, to confirm adjusted lots and buildings thereon will continue to conform to RL-1 zoning standards and these regulations.

\*\*Front porches of the single-family homes are required to meet section 9-7-4, "Setback Encroachments for Front Porches", B.R.C. 1981 based on the approved front setback of 19 feet.

**The above Table of Zoning Limits For Single Family Homes, with minor refinements, has been added to the drawings and is shown on Sheet SR-5.**

#### Building Height

1. The current definition of height in the code per section 9-16, "Definitions," B.R.C. 1981 is as follows:

"Height" means the vertical distance from the lowest point within twenty-five feet of the tallest side of the structure to the uppermost point of the roof. The lowest point shall be calculated using the natural grade. The tallest side shall be that side whose lowest exposed exterior point is lower in elevation than the lowest exposed exterior point of any other side of the building.

**Sheet SR-2 includes a Table Of Building Heights for the entire Armory project.**

2. The city no longer recognizes the 1958 contours. Therefore, buildings must not exceed 35 feet from existing natural grade as noted above. Although grade is expected to change with the technical document final grading plans, the proposed heights of buildings must be confirmed at Site Review so that unexpected height modifications can be avoided. Staff does not find that any future height modifications would be appropriate on this site considering the surrounding context. Based on current information on building design, include elevation points at the highest point of each structure and the elevation point of the lowest point within 25 feet of the structure according today's grade for reference. Revise the calculations within the plan set to include these numbers and remove calculations and references to 1958 contours.

**Revised existing site contours for 1993 have been incorporated into the site data for the existing townhomes east of the Armory site. These contours, provided by City of Boulder Mapping Department, pre-date development of this property. Existing contours, surveyed by Flagstaff Surveying, for the Armory Property have been used for "existing natural grades" on the Armory site.**

3. Indicate proposed height of the trellis and gazebo structures. Please note that accessory structures have a maximum height of 20 feet.

**The Height Table on Sheet SR-2 includes accessory structures.**

4. Staff understands that fill would go into the southwest corner of the site. Please be advised that the residence in that location would still have to meet the height limits according to existing natural grade and fill upward would not permit a taller residence in that location according to the finished grade. Please respond with your understanding of this issue.

**Earth fill material, added in the southwest corner of the site, is incorporated in the data combined into the Height Table on sheet SR-2. Fill material has not been used to increase the overall height of the Single Family Home No. 9.**

#### Accessory Buildings

1. Staff previously questioned whether accessory structures were contemplated for the development. The applicant discussed the new gazebo and trellis as part of their response. Staff does not see any issues with those structures. Staff's concern was more related to accessory buildings like tuff sheds etc. for the dwellings. Is it expected that single-family homeowners (and maybe any of the multi-family owners) would building or add accessory buildings to their building sites? This is important to know at this phase as there are specific setbacks that must be abided by. If accessory structures did not meet these setbacks in the future, a new Site Review may be required and it would be good to know these details now to avoid this issue.

**Accessory buildings such as "tuff sheds", garden sheds, wood sheds and the like will not be allowed in the development.**

## Parking

2. Include minimum dimensions within the parking garages. It appears that some spaces within paired home model #1 and the row homes buildings #10 and #12 may be less than the 19 foot length requirement. Please revise to meet this requirement or indicate the spaces as compact and affirm that the percentage of compact spaces does not exceed the 50% limit for compact stalls.

**Garage dimensions have been added to the Architectural Plans. All garages meet the minimum 19 foot full size parking space length.**

3. The project appears to require a 25% parking reduction, since there are less than 87 non-tandem, private spaces shown (i.e., 65). Although there are spaces within the public rights-of-way, tandem spaces, and extra spaces for single-family homes, these spaces cannot count towards the total number required, but certainly can be used as justification for the parking reduction. Please submit criteria response to the parking reduction criteria of section 9-2-14(h)(2)(K), B.R.C. 1981.

**A Parking Summary Table has been added to Sheet SR-6 which illustrates the amount of parking required by the project and the actual parking provided. Due to methodology of counting parking spaces, where driveway parking does not count, we are requesting a 26% parking reduction for the multifamily portion of the development. Overall, the project provides 150 parking spaces for 37 dwelling units.**

4. Clarify on the plan the exact number of on-street spaces conforming to the minimum widths of 8' X 23' for interior spaces and 8' X 20' for exterior spaces, also minding distance requirements from intersections. Dimensions shall be added to the plan.

**On street parallel parking is shown hatched on the Site Plan and the spaces are dimensioned.**

5. A parking data summary shall be added to the site development plan sheet that confirms how the project relates to parking regulations. The table should include the total number of 3-bedroom units versus 4-bedroom units and the required parking for the multi-family (i.e., 78) versus the number of spaces required for the single-family (i.e., 9) with the appropriate totals (i.e., 87 spaces) and how the projects rates against the requirements.

**Due to a change in Land Use Definitions, where any habitable room with a door counts as a bedroom, the proposal has been revised to allow for 4 bedrooms in the market rate Row Home and Paired Home units. A Parking Summary is shown on Sheet SR-6 to illustrate the parking requirements and the parking reduction required.**

In addition and separately, the numbers of tandem spaces and on-street spaces that would justify the parking reduction should also be added. Staff has estimated and recommends the following breakdown: 65 qualifying parking spaces, roughly 19 on-street parking spaces, 28 tandem spaces for the benefit of the multi-family units, 9 extra garage spaces for the single-family, and 17 tandem spaces for the benefit of the single-family units. This results in well over 100 spaces that will be used by residents of the development.

**A Parking Summary Table has been added to Sheet SR-6 which illustrates the amount of parking required by the project and the actual parking provided. Overall, the project provides 150 parking spaces for 37 dwelling units.**

## Open Space

1. Per recent phone conversations, please revise the Site Development Plan to reflect the revised plan sent to staff via PDF that breaks down open space by tree lawns, porches and patios etc. and also include the submitted open space plan showing building and deck/patio coverages into the main plan set.

**A Open Space Exhibit showing site areas included in the Open Space calculations has been added to Sheet SR-6. Areas counted for Tree Lawns, Porches and Patios are noted separately and this type of open space meets the maximum thresholds.**

## Solar Access

1. On the shadow analysis, add December 21<sup>st</sup> in parenthesis. It may be advisable to show June 21<sup>st</sup> and perhaps sometime in the fall or spring for comparison to show that the dwellings will be open to sunlight for most of the

year.

**The shadows cast by the structures comply with Section 9-9-17. Additional Shadow Diagrams are provided on Sheet SR-4 to show the actual shadows cast on June 21<sup>st</sup>, September 21<sup>st</sup>, for comparison to the December 21<sup>st</sup> diagram. A Site Section has been added to shown actual sun angles cast from a typical single family home onto the adjacent neighbor to the north.**

2. Please be advised that the although the present solar access plans show compliance with the regulations of section 9-9-17, "Solar Access", B.R.C. 1981, final solar access drawings with topographic information will be required for each building near peripheral property lines at time of Technical Documents. It would be prudent to make sure that all buildings near the property lines will continue to meet the regulations, as staff would not see any justification to approve a waiver to the said regulations at a later stage.

**The shadows cast by the structures comply with Section 9-9-17 with respect to adjacent properties.**

#### Signs

The fourth sheet in the submittal packet indicates a freestanding sign planned for the project. Site Review may not increase the overall allowed square footage of a freestanding sign. Per section 9-9-21(e) Table 9-12 BRC 1981 freestanding signs in all residential districts with a residential use may not exceed 16 square feet per side or 32 square feet total. The entire base of the sign as shown would could towards the total per section 9-9-21(d)(6)(G) BRC 1981. Contact staff with any questions (Elizabeth Lokocz, 303.441.3138).

**A project sign has been included for an illustration of the conceptual design. Since this element of the project cannot be approved through the Site Review process, we will submit a final design during the Technical Document Review phase of the project.**